ticularly at the oil industry, prescribed the manner in which they were to be exploited. The development of these resources was to be entrusted to corporations or "régies" in which the Government as well as private capital, both Rumanian and foreign, would participate, but in such a way as to permit of the majority of shares being controlled by the Rumanian Government. At the same time laws were enacted for increasing the utilization of methane gas (C.H.4) which was already in use both for lighting and heating purposes in Transylvania, and which is available as a large source of industrial power, its output being calculated to amount to as much as 2,000 million cubic metres per annum, the consumption of which for 1930 reached over 503 million c. metres. The methods used by the Liberal Party to secure a mainhold of the supplies of methane gas are particularly illuminating of the mentality of the leaders of that party, as they were revealed by M. Madgearu in the Rumanian Chamber in 1929. An exclusive monopoly was conferred on a group of "Liberals," who supplied the gas to industrialists at arbitrary prices so as to force the latter out of the market and leave this to rival firms belonging to adepts of the "Liberal" Party. All the efforts of the Liberal Party to promote the nationalization of this gas were aimed at securing the economic mastery of Transylvanian industries. A similar law was also passed dealing with water power, the reserves of which are estimated at 5,206,225 H.P., of which amount 735,425 h.p. represent 50 per cent of the force produced at the Iron Gates by the Danube, 1,422,463 h.p. by the tributaries of the Theiss, 2,164,748 h.p. by the Danube tributaries between the Timish and the Sereth, and the remaining 884,665 h.p. by the Sereth and its tributaries. Of all this potential force only about 52,000 h.p. is actually in use. The State owned practically the totality of the railway lines, most of the extensive fisheries in the marshes and delta of the Danube, the salt mines of Ocnele Mari, Slanic, Uioara and Targu Ocna, which are exploited as a State monopoly and assure to it a revenue of some 700 million lei per annum, over 75 per cent of the entire vast timberlands, several coal and iron mines, the gold mines in the Bihor mountains, the annual output of which is about 2,500 to 3,000 kilogrammes.

655 maritime and fluvial shipping companies, the docks, ports, warehouses, and grain elevators of Braila, Galatz, and Constantsa.

661 471 186 Laws were drafted aiming at the commercialization and exploitation, either independently or in co-operation with the State, of these State-owned properties, as well as of other national resources. But the purpose which actuated the entire economic legislation enacted by the Bratianu Governments was that of preventing foreign capital from acquiring a dominant position in the country. This policy of restraining the activities of foreign capital by legal restrictions was not due to the fact that Rumania might be imperilled by foreign capital securing a preponderating influence, but mainly because the Bratianu party aimed at reserving for themselves the monopoly of such profits as could be made through the exploitation of the national resources. The direct result of this policy was to sink whatever Rumanian capital existed in big enterprises, while agriculture was entirely neglected, and to deplete completely the liquid assets of the country to such an extent that its credit organization was dislocated.

433 457 It is sad to record that during the years when there was a plethora of capital seeking investment which could have been easily attracted to Rumania with the object of endowing her with an adequate equipment for the development of her immense resources, such narrow and selfish views should have prevailed among her rulers. Indeed, had the opposite policy been adopted it would have secured prosperity to her even during the lean years which are now upon us. Foreign capital naturally fought shy, and refused to be enticed into enterprises in which it was not allowed to exercise legitimate control, which in many instances would have proved both salutary and indispensable. Rumania's natural wealth certainly provides a basis for industrial activity, there is an abundance of raw material, fuel, as well as a supply of cheap labour, but there is a serious deficiency of capital, which is reflected by the high rates of interest 426 437 454 prevalent. Commercial bills were discounted at rates varying between 18 per cent and 30 per cent, and first mortgages were concluded on the basis of an average interest of 20 per

241 the peasants and the reduced 1942 sowings both
656 of grain and of sugar-beet indicated continued
435 dissatisfaction. Finally, by the spring of 1943 a wider ratio was reached, agricultural prices being four times as high as in 1939 and wholesale prices in general three and a half times as high. Nevertheless, this very considerable measure of inflation
[458] has shaken public confidence in the value of money so that peasants increasingly resort to barter transactions.

●[455] In the hope of obtaining better control over grain supplies the Government in the autumn of 1942 nationalised the grain trade, later they relaxed this to the extent of leaving the export business to a few selected firms and the internal collection to the Army and to the National Institute of Co-operation. This body handled the pre-war grain marketing scheme, and their
[563] activities—because of the expulsion of Jews from wholesale and retail trade—have recently developed rapidly in the supply of seeds to peasants (80,000 tons of seed distributed in 1942) as well as consumers' goods to peasants and townspeople. But it still proved difficult to extract enough food from the peasants to feed the towns. For the 1943 harvest detailed regulations were made concerning the quantities the peasant might keep for seed, for his family and for his animals, and threshing operations were subjected to inspection. Yet these rules could not in practice be administered.

423 It is now generally agreed in Rumania that the
471 smallness of the holdings has been a principal obstacle to effective organisation of agriculture in war-time, and that a change to larger units of production is needed. Any approach to collectivisation on the Soviet model, however, would be regarded as contradictory to the land reform policy and a threat to the Rumanian State. The official policy, though it has not yet taken its final form, is to maintain private property but to proceed no further with expropriation and division of large estates, and to maintain existing medium holdings by prohibiting their sub-division for inheritance or other reasons. Schemes for the consolidation of strips are also contemplated for a more opportune moment. Further, in order to
474 increase production and to improve the peasants' methods and standards of life, communal farming associations, known as *obștii*, are to be formed. In these associations, farming equipment is to be pooled so that the small-holder would have the same resources as the large farmer. Each *obștie* is to embrace a village and perform all the functions of a co-operative, including joint purchase and sale, use of breeding animals, processing of crops, etc. Villages which are prepared to form themselves into *obștii* and to undertake to work the land according to State directions, are promised tractors, seed and breeding stock without payment. In this way it is hoped that some of the advantages of collectivisation may be achieved while retaining those of individual ownership. But, unless accompanied by far-reaching industrial development, the plan can but aggravate rural unemployment. It is not known how this innovation has been received by the peasants. It was reported in April 1943 that 270 of these communal associations had been formed—an insignificant number—and it is believed that the Government is allocating to them some of the tractors imported from Germany in the war years.*

241 The success of the *obștii* plan, and indeed of any plan for up-grading Rumanian agriculture, depends

* In June, 1943, a temporary ban was placed on the formation of any new *obștie*, because there was insufficient agricultural machinery to supply to them.

CHAPTER IV

327 compared with the following annual pre-war figures:

| Year | '000 tons |
|---|---|
| 1936 .. .. .. | 225 |
| 1937 .. .. .. | 243 |
| 1938 .. .. .. | 326 |
| 1939 .. .. .. | 383 |

### 4. Iron and Steel Consumption

The limited native iron and steel production, which was never sufficient to keep the consuming industries fully supplied, became an increasing impediment with the rapid development of these industries during the last few years. Iron and steel products had therefore to be imported at [439] the rate of 2/300,000 tons a year. The outbreak of war in Europe, and consequent restriction of supplies meant a falling off of imports, so that an acute shortage developed. During 1942, however, the situation improved somewhat in that Germany was reported to have sent a total of 130,000 tons of iron and steel products to Rumania.

### 5. German Penetration

327 A small degree of penetration into the Ru-
439 manian iron and steel industry has been achieved
473 by the Hermann Göring Werke, which, after the partition of Czechoslovakia, acquired Czech interests in Reşiţa amounting to 6 per cent., which were later increased to 20 per cent.

In 1941 a company with 50 per cent. German and the remainder Rumanian capital, was formed to take over the management of Reşiţa and its associated companies. The Malaxa Works later also came under the organisation of this company.

## C. LEAD AND ZINC

### 1. General

329 In pre-war years Rumania was practically
439 self-sufficient in lead but not in zinc, since she possessed no zinc-smelting facilities. Her production of zinc concentrates was exported, mainly to Poland, part of the metal content being re-imported after smelting. Belgium and Poland were her chief suppliers of metallic zinc.

### 2. Mines and Plant

316 The mining of lead and zinc constituted only a small industry in Rumania. Part of the production, almost 50 per cent. in the case of lead, was obtained incidentally to the working of gold and silver ores. The principal producers were [655] the State-owned mines Baia Sprie, Capnic, Văratec, Valea Roşie, Dealul Crucii, and the Herja mine owned by Phœnix S.A.; all are situated in the Baia Mare district in North Transylvania. The Herja ores averaged approximately 8 per cent. lead and 14 per cent. zinc, whilst ores from the other mines averaged only 4 per cent. lead and 10 per cent. zinc.

135 There are other deposits in the Transylvanian Erzgebirge, where galena and blende are associated with gold occurrences, in the Hunedoara, Banat, and Severin districts, and at Cârlibaba in the Bucovina.

329 Rumania possessed two lead smelters for the treatment of her production of concentrates: the Phœnix plant at Lucaci, with a capacity for about 5,000 tons of crude lead and 3,000 tons of refined lead, and a plant at Ferian belonging to Uzinele Metallurgica din Firiza de Jos. There

[22a]

399 In the middle of 1942, under German influence, the Rumanian Government proceeded to rationalise the industry, and a Board was set up to control the country's most important armaments and aircraft factories. Under this scheme German managers or supervisors went into the aircraft factories and their main activity has since been the repair of damaged aircraft, though some new production continues. For instance, in August 1942 it was reported that an order for 200 I.A.R. fighter aircraft with 1,200 h.p. engines had been placed on behalf of the Rumanian Air Force.

[439] Rumania is still buying Italian (Savoia Marchetti) aircraft, German gliders, and various components from Germany and Switzerland.

Apart from the aircraft factories listed below, facilities for complete overhauls of airframes and engines exist at the Aviation Arsenal in Bucarest, and it has been reported that a former jute factory in Bucarest is now utilised for repair work, and that the Astra-Fipera works, also in Bucarest, are repairing engines.

Information regarding the number of workers engaged in the aircraft industry is too fragmentary to enable any estimate of their total number to be made.

●[655] The main producing companies are as follows:—

(a) *I.A.R.* (*Industria Aeronautică Română*), the principal Rumanian aircraft company, is State-owned. It has a factory at Braşov (87 miles N.N.E. of Bucarest) for the manufacture of aircraft and aero-engines, and also produces high-precision tools of a very good quality. The factory occupies a site of some 125 acres, adjoining an airfield about 3 or 4 miles north-east of the central station of Braşov. It is a well-equipped plant and possessed considerable stocks of tools and raw materials at the beginning of the war.

The aircraft, produced before the war at a rate of about 8 monthly, consisted mainly of Potez 25 and I.A.R. 15 and 16 single-seater fighters and an I.A.R. type of four-seater commercial aircraft. The engine department produced under licence, at the rate of 25 monthly, an adaptation of the Gnôme-et-Rhône 14N. A licence was also held for Junio 211 engines, but none of these appear to have been built.

[439] Since the war this factory has been under German control, exercised through a branch of the Hermann Göring Works. The main types of aircraft produced are I.A.R. 80 and 101 single-engined fighters and the Potez 63. Engine production appears to range between 20 and 30 a month, though the German management is trying to double that figure. Airframe output recently appears to have been about 20 monthly. In addition, a good deal of repair work is done for Germany.

The company depends largely upon imported components. It has a propeller department which, about the end of 1941, was transferred to a former paper factory in Azuga; its output, however, does not appear to have been equal to requirements, for in July, 1942, propellers were being imported from Germany.

(b) *S.E.T.* (*Societatea pentru Exploatări Tehnice Industria Națională Aeronautică S.A.R.*) known up till September 1938 as I.N.A., i.e., *Industria Națională Aeronautică S.A.R.* This company was founded in 1937, sponsored by

## A. TEXTILES AND TEXTILE FIBRES

248 In the years preceding the war, Rumania had been making efforts, with some success, to reduce the degree of her previous dependence on imports of textile fibres. The cotton crop of fair average quality, though still far short of the expanded [236] mill capacity, was gradually increasing, while indigenous wool supplies—though chiefly of coarse quality—were in the main enough for peasant clothing. Home-grown crops of hemp and flax were sufficient for internal needs, while jute, coir and hard hemps were imported to complete the requirements of industrial fibres.

248 439 The cessation of imports and loss of territory to her neighbours have entirely changed the supply picture, and combined with demands by Germany for imports have greatly reduced the textile "standard of living."

### 1. Cotton

With the development of her processing industry, Rumania had increased raw cotton imports and was successfully encouraging domestic cotton production. By 1938, imports at some 21,000 tons were about five times larger than those of 1932, and the domestic crop yield, less than 20 tons in 1932, had risen to about 600 tons. The principal sources of raw cotton were Egypt, the U.S.A., and Great Britain.

With the outbreak of war, Rumanian imports generally were curtailed, the combined total of raw cotton and cotton materials being 14,700 tons in 1940, and 13,800 tons in 1941. Thereafter, Rumania was dependent on such supplies as she could obtain by barter, lower grade cotton from Turkey and Italy and cotton and staple fibre union cloth from Italy.

248 Since 1938 the Rumanian cotton crop has continued to increase, though it is still very short of normal requirements, while the cession of some 8,000 ha. (20,000 acres) of cotton land to Bulgaria in 1940, and unfavourable weather conditions, tended to restrict the cotton-growing programme.

Prior to the territorial changes of 1940, cotton was grown close to the Danube at Craiova, and especially in the Southern Dobruja. With the cession of most of this land to Bulgaria, cotton is now mostly grown on the north bank of the Danube, at Banloc near Timişoara in the Banat and in the districts of Teleorman, Vlasca and Ialomita. The crop in 1939 was 2,200 tons from less than 10,000 ha. (24,000 acres) and in 1942 was estimated at 5,000 tons from about 20,000 ha. (50,000 acres). A further increase in area has been planned, but the harvest, particularly in the north, is largely dependent upon climatic conditions. The type of cotton now produced is considered superior to Indian, and similar in quality to American.

288 The chief mill centres are at Arad, Bucarest, Cluj, Iaşi, Lugoj and Timişoara; of these, Cluj is the only one to have been affected by the transfer of territory. Cotton supplies are dis- [655] tributed under the direction of the Department of Industry and Trade by "Romacotin," which also has a monopoly of purchase from producers at prices fixed by the General Price Commissariat. Cotton may be sold only to those Government agencies to whom it has to be delivered by

288 31st December. There appears to be a good deal of passive resistance and hoarding.

Cotton spindles had increased from 35,600 in 1927 to 250,000 in 1938, and altogether there were 18 mills of some importance. Power looms in 1938 are believed to have amounted to about 16,000. The apparent disproportion of spindle compared with loom capacity was due to Rumania being a fairly important buyer of foreign yarns, imports being 23,000 tons in 1936, 27,000 in 1937, 14,000 in 1938 and 15,000 in 1939. About 70 per cent. of these yarns were of coarse cotton, called "peasants' yarns," for use in the handicraft industry only, and imported mainly from Czechoslovakia, Germany, Italy and Great Britain.

2. Wool

236 Rumania, which had the largest wool-growing industry in S.E. Europe, was also the most important consumer. Production of raw wool in 1938 was about 20,000 tons (greasy) and imports were about 1,000 tons, and of wool yarn about 2,500 tons. On account of its coarse quality, not much more than one-third of the domestic wool clip is ordinarily used in the mechanised industry, the bulk being consumed in village handicraft. Since the war and subsequent loss of territory, [233] the sheep population of Rumania is believed to have declined by some 25 to 30 per cent., and all imports have ceased, so that the industry is now entirely dependent upon the reduced domestic clip.

288 Rumania was never a large importer of woollen cloth, and the weaving industry was always more highly developed than the spinning. The output of cloth in 1936 and 1937 being 6,000 tons and 6,600 tons respectively. In 1938, there were 127,000 mechanised spindles and 4,300 looms, the chief mill centres, in order of importance, being at Buhusi (district of Neamţi), Braşov, Timişoara, Bacău, Bucarest and Sibiu.

655 Both the raw material and the woollen-textile
236 industry are nominally under strict Government
288 control, as by a decree in April 1942, the numbers of sheep and lambs and the quantity of shorn wool must be declared each year, and the wool itself must be surrendered to collecting centres at specified dates. As the due date for the 1942 collection had to be extended month by month up till January 10th, 1943, and all penalties abrogated, the success of the scheme appears to have been doubtful. No wool can be bought or sold except by permit of the Ministry of National Economy, and distribution to the mills is entrusted to an organisation known as "OFIL" (*Oficiul Lânei*), a company with a capital of 10 million lei, and including all firms concerned in the preparation of wool.

3. Hemp

248 In 1937 the area under hemp, which is grown chiefly in the Banat, was 50,000 ha. (123,000 acres) and the outturn 27,000 tons, most of which was consumed internally. Exact details of wartime plantings are not known, but are reported as 45,000 ha. (112,000 acres) and 32,500 ha. (80,300 acres) in 1941 and 1942, and the yield at about 21,000 and 20,000 tons respectively. For 1943, farmers have been urged to plant more hemp—the "national textile"—in order to cover clothing,

# A. RAILWAYS

## I. Pre-War Conditions

### 1. Communications

496 Before the outbreak of the present war, the Rumanian State Railways' system was as follows:

| | km. | miles |
|---|---|---|
| Total .. .. .. | 11,375 | 7,053 |
| of which: | | |
| Standard gauge .. | 10,715 | 6,643 |
| Narrow gauge .. | 660 | 410 |

More than half of this mileage had been acquired following the 1914–18 war, when

5,324 km. (3,299 miles) in Transylvania
1,234 km. (765 miles) in Bessarabia
555 km. (344 miles) in Northern Bucovina

were transferred to Rumania. As a break of gauge existed between the railways of old Rumania and those in the former Russian State of Bessarabia, conversion to the 4ft. 8½in. gauge had to be undertaken. Short sections of line are owned by 17 private companies, but all the lines of any importance are State-owned.

●[655]

Rumania was relatively well furnished with railway communications. The length of railway line per 100 sq. km. in 1936 was 3.8 km. (6.3 miles per 100 sq. miles), the same as in Yugoslavia, while in Bulgaria it was 3.2 km. (5.1 miles per 100 sq. miles), and the commercial requirements of the country were adequately served thereby. Since the 1914–18 war, the difficulties connected with the unification of three different systems of railway (Hungarian, Russian and Rumanian) were gradually overcome, and with the conversion of the Russian-gauge track in Bessarabia, the railway organisation became more or less standardised. Three of Rumania's five frontiers were crossed by main lines and the other two by branch lines.

1. *Polish Frontier*

This was crossed by the main Bucarest-Cernăuți line at Cernăuți, and was formerly the direct line for through traffic from Bucarest to Warsaw, but the conversions of the railway system in Russo-Poland from standard to 5 ft. gauge in the autumn of 1939, rendered through traffic to Warsaw by this district route impossible without transhipment.

2. *Hungarian Frontier*

The main lines Bucarest—Arad—Curtici and Bucarest—Oradea—Episcopia Bihor provided direct communication between Bucarest and Western Europe via Budapest.

3. *Yugoslavian Frontiers*

Through traffic from Bucarest to Western Europe via Italy and the Simplon Tunnel was served by the main-line route, Bucarest—Timișoara—Jimbolia.

4. *Bulgarian Frontier*

The only direct railway connection between Bucarest and Sofia was by a roundabout route from Bucarest through the Dobruja. The shortest route was by train to Giurgiu, whence ferry steamers cross the Danube to the Bulgarian railway at Ruse.

5. *Russian Frontier*

There was only one frontier crossing, at Tighina—Tiraspol, served by the main line to Iași.

[39 b]

496 whence there was a slow train service to Tighina. Change of gauge took place at Tighina and Tiraspol, necessitating transhipment of both passenger and goods traffic at one or other of these points.

From a strategic point of view, the railway system of Romania suffered from three main disabilities :—

(a) Out of the total of 11,375 km. (7,063 miles) only 491 km. (304 miles) were double tracked.

(b) The railway system of the country was originally constructed to serve the needs of Romania and Hungary individually, and on account of topographical and political difficulties communications between the two countries were limited to the minimum requirements. As a result, communications across the Carpathian Mountains were quite inadequate, consisting only of three single-line railways.

(c) The railway system of Transylvania was constructed with a view to the defence of the old Hungarian eastern frontier along the Carpathians, and is, in consequence, particularly ill-adapted for north-to-south movements.

[655] The Romanian State Railways (*Regia Autonomă a Căilor Ferate Române*—in short C.F.R.), set up in 1929, was directed by an Administrative Council in Bucarest, consisting of 11 members, including a representative of the Minister of Communications. In addition, there was a delegate of the Minister of War and a Government Commissioner with an advisory voice and the right to veto all decisions of the Council. For administrative and maintenance purposes, the railways were divided up into four separate Managing Directions at Bucarest, Timişoara, Cluj and Iaşi.

**2. Principal Routes**

The principal railway routes are set out below :—

1. Jimbolia (Yugoslav frontier)—Timişoara—Craiova—Bucarest, of comparatively recent reconstruction and relatively well maintained.

2. Curtici—Arad—Vintul-de-Jos—Sighişoara—Braşov—Bucarest, which is a main route from the Hungarian frontier.

3. Episcopia Bihor—Cluj—Teiuş—Sighişoara—Braşov—Bucarest, a main route from the Hungarian frontier Episcopia Bihor (Budapest and Vienna) to Bucarest, using, between Teiuş and Bucarest, the same line as route 2.

4. Oriţeni—Cernăuţi—Paşcani—Adjud—Mărăşeşti—Buzau—Ploeşti—Bucarest. This was formerly the direct route between Bucarest and Warsaw, and is a natural route for traffic between Eastern and Central Rumania (including the oilfields) and Eastern and Northern Germany.

5. Chişinău—Iaşi—Tecuci—Buzău—Bucarest. This line, as from Iaşi, was reconstructed a few years ago.

6. Chişinău—Reni—Galaţi—Brăila—Buzău—Bucarest.

7. Constanţa—Feteşti—Cinlniţa—Bucarest. This line, connecting Bucarest with the Black Sea port of Constanţa, was reconstructed a few years ago.

505 439 trade is carried on the Danube to European markets, Germany in particular, and, with the exception of an exceedingly limited traffic with Turkey, and a few intermittent shipments of oil to enemy ports in the Aegean Sea, Rumania's foreign sea-borne trade has been brought virtually to a standstill.

In addition to traffic in the Black Sea with U.S.S.R., Bulgarian and Turkish ports, Rumania in pre-war days had important commercial relations with most European and other countries overseas, the trade routes being via the Dardanelles, Mediterranean, Suez Canal and the Straits of Gibraltar.

### 2. Mercantile Marine

505 [652] All merchant-shipping activities are controlled by the Ministry of Air and Marine. Rumania's ocean-going mercantile marine in 1939 was constituted as follows:—

| | | G.R.T. |
|---|---|---|
| 6 | cargo and passenger motor vessels | 27,061 |
| 16 | cargo steamers .. .. .. | 67,193 |
| 3 | steam tankers .. .. .. | 14,737 |
| 25 | Total .. .. .. | 108,991 |

●[655] Of the 19 cargo steamers and tankers, 11 were oil-fired and 8 coal burners. Fourteen of these vessels were owned by the Rumanian State Maritime Service (*Servicial Maritim Roman*), the principal shipping company in Rumania, whilst the three tankers belonged to the Steaua Romana Petroleum Company of Bucarest. The remainder were privately owned.

[418] Consequent upon her entry into the war Rumania's mercantile marine came under Axis control and most of her vessels are trading for German and Italian account, partly in the Adriatic and Aegean, and partly in the Black Sea.

A statement of Rumania's estimated non-tanker merchant-shipping resources on the 30th April, 1943, follows:—

ESTIMATED RUMANIAN MERCANTILE MARINE RESOURCES (NON-TANKER) UNDER AXIS CONTROL IN THE MEDITERRANEAN AND BLACK SEA AT 30TH APRIL, 1943.

| *Tonnage Category* | *No. of Vessels* | *Total G.R.T.* |
|---|---|---|
| 100/499 .. .. | 3 | 378 |
| 500/999 .. .. | — | — |
| 1,000 .. .. | 2 | 2,798 |
| 2,000 .. .. | 2 | 4,946 |
| 3,000 .. .. | 3 | 10,170 |
| 4,000 .. .. | — | — |
| 5,000 .. .. | 2 | 11,395 |
| 6,000 .. .. | 3 | 20,280 |
| *Aggregate* .. | 15 | 50,147 |

[721] As to her tanker tonnage, two vessels aggregating 11,705 G.R.T. were seized and are now in Allied service, whilst the third, of 3,032 G.R.T., was sunk in December, 1941, in the Aegean Sea.

### 3. Ports

504 The chief ports for sea-going vessels are Constanța on the Black Sea and Brăila and Galați on the Danube, which both handle river shipping as well.

[42b]

133 502 trained pilots is compulsory, while the large tows have to be broken up into smaller units. This sector of the Danube cannot be negotiated at night, which constitutes an enormous hindrance for large-scale traffic. In order to speed up the traffic, the use of suspension railways and locomotives on rails laid along the river bank was introduced before the war, but the system has met with only moderate success.

[503] Navigation in the Maritime sector of the Danube is affected by silting up—particularly in the autumn—and constant dredging has to be carried out in the Sulina branch to maintain sufficient depth for passage of vessels up to Galaţi. The depth of this sector was 24 ft. in 1939, permitting the entry of vessels of medium draught only. Danube navigation is held up for varying periods between November and March by ice, averaging 30-50 days, and occasionally even for 90 days.

499 There are no permanent bridges on the Danube to connect Rumania with Bulgaria. However, a Rumanian-Bulgarian Commission was established in 1942 to remedy this deficiency by arranging for the construction of a bridge, which will take five years to complete, between Giurgiu and Ruse. In the meantime a ferry system is in use between Giurgiu and Ruse carrying important supplies of oil for the German forces in Greece.

### 3. River Ports

503 504 There are in all some 38 river ports, of which the most important, all on the Danube (from west to east), are as follows :—

| | |
|---|---|
| Moldova | Oltenița |
| Orșova | Brăila |
| Turnu Severin | Galați |
| Giurgiu | Sulina |

Since the war started considerable improvements have already been made on the Danube. This is of special significance for, though this waterway is of little use for Rumanian internal traffic, since the closing of the sea route between Rumania and North Germany, it has become vitally important for the carrying of bulky transport. As early as 1940 a scheme for the rationalisation of Danube traffic was put into operation, and the installations of Giurgiu, the main Danube port for oil transport, were improved.

To avoid congestion at Giurgiu, the Danube ports of New Moldova and Orșova have been enlarged. Internal traffic has been diverted to Oltenița, which is also used for the unloading of incoming traffic. The construction of new harbour installations is being carried out by a German-Rumania company.

### 4. Organisation of Inland Water Shipping

505 656 [555] Rumanian Danube shipping is under State control, and organisation is carried out by firms which are partly State-owned and partly owned by private individuals. The most important company is the State-owned "N.F.R." (*Navigațiunea Fluvială Română*), and of lesser importance are the privately owned companies "S.R.D." (*S.A.R. de Navigație pe Dunăre*) and "Sind" (*Società Italiana di Navigazione Danubiana*).

505 648 All Rumanian shipping companies are members of the Danube Shipping Pool, which is under German supervision, headed by the *Deutsche Donauschiffahrtsgruppe*, which is closely connected with the Hermann Goering-Werke für Binnenschiffahrt. The importance of the Danube Pool (exclusive of the Tanker Pool) will be realised when it is borne in mind that between 1932-1937 the freight carried annually by its vessels on the